



**North Carolina**  
**Criminal Justice Law Enforcement**  
**Automated Data Services**  
**(CJLEADS)**

**Quarterly Report**  
**April 2012**

**North Carolina**  
**Office of the State Controller**

**David McCoy, State Controller**

## Table of Contents

I. Executive Summary .....	2
II. CJLEADS Statewide Deployment .....	5
A. CJLEADS Deployment – Regional Law Enforcement .....	5
B. CJLEADS Deployment – Statewide Organizations .....	5
C. CJLEADS Usage .....	6
III. Application Development Activities - CJLEADS Release 5 .....	6
IV. CJLEADS Application Design and Development .....	7
V. CJLEADS Challenges .....	10
VI. Next Steps.....	16
VII. Appendix	
Appendix A: CJLEADS Program History .....	17
Appendix B: Statewide Deployment Map .....	19
Appendix C: Phase II End User Survey.....	20
Appendix D: Return on Investment Analysis .....	23
Appendix F: CJLEADS – Functional Needs .....	27
Appendix G: Mobile Device Survey.....	30

## I. Executive Summary

In 2008, the North Carolina General Assembly initiated the Criminal Justice Data Integration Program with the mandate to create a statewide crime analysis system designed to save time, save money, and save lives. Since the project's inception, the Office of the State Controller (OSC) has managed CJLEADS and has worked with SAS as a vendor partner and in collaboration with North Carolina's criminal justice organizations to develop and implement the Criminal Justice Law Enforcement Automated Data Services (CJLEADS) system.

Consistent with the Legislature's intent to serve criminal justice professionals and improve the safety of North Carolina's citizens, CJLEADS has two primary objectives:

1. To provide a comprehensive view of an offender through a single application, allowing for positive identification of an offender through a photographic image.
2. To provide an "offender watch" capability to alert criminal justice professionals when an offender has a change in status.

During 2011, CJLEADS received the following awards:

- 2011 Computerworld Honors Laureate
- 2011 SAS Enterprise Excellence Award (Government Sector)
- 2011 Council of State Government Innovations Award for the Southern Region
- 2011 *InformationWeek* Government Innovators Award

To date, 456 state, local and federal organizations have signed license and usage agreements and have been authorized to access CJLEADS. CJLEADS' Business Operations has trained 17,086 users throughout the State conducting nearly 1,500 training classes. Feedback from organizations using CJLEADS continues to be extremely positive.

CJLEADS deployed Release 5 in February 2012, adding Advanced Search and Offender Merge capability as well as a series of new reports including a Pending DWI Report, and reports identifying offenders with outstanding processes that have upcoming court dates, are on probation or are currently incarcerated. Planning is underway for Release 6 which is scheduled for release in June 2012. This release will enhance the watch list functionality and will provide a modified version of CJLEADS for mobile devices.

While it is clear that the project has made very significant progress in integrating the State's criminal justice data, there is no doubt that significant work remains and continuous refinement is needed to ensure that CJLEADS provides law enforcement and the courts with a robust tool that helps reduce crime, prosecute offenders and keep North Carolina safe.

CJLEADS provides essential information to criminal justice professionals today. As CJLEADS works with the courts, corrections and law enforcement personnel throughout the state, we continue to find that technology and activity associated with public safety, criminal

investigations, and other law enforcement activities are constantly changing. While information technology systems typically complete the design and development lifecycle and move into the operations and maintenance phase where project resources are focused primarily on day-to-day application support, the systems can quickly begin to lose relevancy and in a matter of just a few years can become obsolete. As such, it is critical for the State to adopt a different project management approach for CJLEADS and continue design and development activities in parallel with operations and maintenance. Future key development efforts should focus on:

1. Critical data to be incorporated in the CJLEADS application:
  - Access to real-time statewide warrant information from the Administrative Office of the Courts.
  - Access to federal Hot Files, as well as criminal history information through the DCI network at the Department of Justice and State Bureau of Investigation.
  - Access to data to support Division of Motor Vehicles partial plate searches.
  - Access to incident-based information from the North Carolina Data Exchange (NC-DEX) being developed by the Department of Justice.
2. Critical CJLEADS development to ensure the application can support new and improving technology including:
  - An interface to allow users to capture images in the field and leverage the Division of Motor Vehicles facial recognition technology to quickly provide possible identities.
  - A mobile application version for use on smartphones and tablets (Scheduled for Release 6).

On-going operations and maintenance requirements as well the protection and enhancement of the State's investment in CJLEADS faces several challenges. Access to federal data is a critical component for CJLEADS. Data storage of key fields as well as real-time access to federal information is currently limited as OSC is managing CJLEADS in support of the courts and law enforcement. The Criminal Justice Information System (CJIS) Security Policy prescribes the manner of access to federal information including the Hot Files (national wanted persons, stolen vehicles, and stolen weapons) and the criminal history record (limiting access to critical data to agencies engaged in the administration of criminal justice). As the OSC was statutorily mandated to develop and manage CJLEADS criminal justice information system, statutory designation as a criminal justice agency may be required to allow access to federal information through the CJLEADS interface. The OSC is working closely with the N.C. Department of Justice, State Bureau of Investigation to address access to this critical data source in CJLEADS.

Adequate funding to support CJLEADS operations and maintenance as well as continued development is critical to protecting the State's investment in CJLEADS and to ensuring the improved safety of North Carolina criminal justice professionals and citizens. In FY 2011-2012, CJLEADS funding was reduced from \$9 million to \$6,632,737. CJLEADS used unexpended one-time project funds of \$1,073,000 to add critical data and functionality to the system in Release 3, 4 and 5. The OSC has submitted a budget expansion request to restore CJLEADS funding to its original amount to ensure that the OSC can adequately support the current

operations and ensure that additional data and capability are developed to meet the General Assembly's mission.

This report provides detail on the accomplishments and future activities of the CJLEADS program.

## **II. CJLEADS Statewide Deployment**

### **A. CJLEADS Deployment – Regional Law Enforcement**

As the statewide plan for deployment nears its completion in June 2012, 456 agencies or 89% of the federal, state or local criminal justice organizations, have completed their agency on-board process. The CJLEADS Business Operations Team will continue to be available to assist the remaining law enforcement organizations in completing their on-boarding process. The CJLEADS Business Operations Team will conduct a high volume of training in the last quarter of FY 2012 to complete the deployment training efforts. On-going training, however, will continue into FY 2013 to ensure all criminal justice organizations have access to training opportunities as needed.

For a map of the statewide deployment regions, please see [Appendix B](#).

#### **Current Deployment Statistics**

As of March 28, 2012, statistics for the CJLEADS statewide deployment to regional law enforcement organizations include:

- 461 law enforcement organizations have worked with the CJLEADS business operations team to gain access to the application.
  - 147 of the 169 Phase I upper and lower Piedmont agencies (including Wake County pilot agencies)
  - 153 of the 183 Phase II southwestern and southeastern agencies
  - 133 of the 140 Phase III northwestern and northeastern agencies
  - 14 federal agencies in North Carolina (FBI, U.S. Secret Services, U.S. Marshalls, etc.)
- To date, over 17,643 end users have been trained in over 1,100 CJLEADS classes, including classroom, web-based classes and night classes to accommodate shift schedules.
- The CJLEADS Train-the-Trainer Program certified 64 trainers who are now conducting training classes for their organizations. To date, these certified CJLEADS trainers have conducted 459 classes.
- CJLEADS trainers have traveled over 59,292 miles throughout the State to provide regional training for law enforcement and courts personnel.

### **B. CJLEADS Deployment – Statewide Organizations**

CJLEADS Business Operations continued deployment to State agencies with personnel resources located throughout the State. State agency deployment statistics as of March 28, 2012 include:

- Twelve State agencies signed license and usage agreements for CJLEADS.
- Classes for judicial personnel have been offered throughout the State at judicial training locations, judicial conferences, and via web-based classes. The CJLEADS Business Operations team has trained over 1,740 AOC court personnel including judges, prosecutors, clerks and magistrates.

- The Department of Correction is using the Train-the-Trainer Program to deploy CJLEADS to probation/parole officers and prison intake officers. To date, a total of 2,174 corrections personnel have been trained.
- The State Highway Patrol is also utilizing the Train-the-Trainer Program. Two SHP trainers have been certified to teach CJLEADS classes and 631 patrol officers have been trained by OSC and SHP trainers.

### **C. CJLEADS Usage**

The number of CJLEADS users accessing the application continues to increase as deployment and training activities expand throughout the State. A comparison of usage statistics for the periods of October through December against January through March indicates that:

- The weekly average number of CJLEADS users grew by 37% from 4,943 to 6,751 as deployments continued across the state.
- The average number of offender and DMV records accessed per user per week has remained steady in the last quarter.
- Since CJLEADS was initially deployed in June 2010, criminal justice professionals have conducted over 5 million searches and accessed nearly 4.3 million offender and DMV records.

OSC continues to receive feedback from CJLEADS users who share the value and benefit of CJLEADS as well as offering suggestions for system refinement and enhancements. For a review of the feedback from a survey sent to Phase II organizations, please see [Appendix C](#).

## **III. Application Development Activities - CJLEADS Release 5**

The CJLEADS Project team continues to work with end users, data source agencies, and SAS to incorporate data and enhance functionality deemed critical to meeting the mission of providing a reliable, complete, and simple-to-use application to serve law enforcement and the courts and thereby improve the safety of our State, its communities, and citizens.

Release 5 was deployed in March 2012. CJLEADS Release 5 added the following data and functionality:

- 1. Advanced Search Capability** – implementation of the enhanced search feature allows law enforcement to search for “unknown” persons using physical characteristics, geographic locations, charge types and categories, warning icons and other criteria. CJLEADS users have requested the ability to use the statewide repository of information available in CJLEADS for research and investigation prior to national and regional events held in North Carolina. In advance of events, such as the national political convention scheduled in Charlotte in 2012, law enforcement

conducts extensive research and investigations to prepare security briefings for state, local and federal law enforcement officers engaged in the security efforts. Similar efforts take place when U.S. or certain State government officials participate in conferences or public appearances. Law enforcement will leverage the Advanced Search capability to identify additional areas of reporting and investigative inquiry capabilities for these events.

2. **Offender Merge Capability** – incomplete or limited identifying information often prevents the ability to merge all records for an offender together into a single cluster of information. A search result, therefore, may show several clusters for the same individual. As the criminal justice professional reviews multiple clusters of information about a person, the ability to combine clusters to view all the information together as a single profile enables an officer to make refined decisions about persons of interest.
3. **Additional Report Capability** – new DWI reports to provide court officials with an aging report of pending DWI cases as well as a report of offenders' count of previous DWI convictions and pending cases across the State. In addition, there are three outstanding process (warrants, orders for arrest, etc.) reports: 1) report of offenders who are currently incarcerated and have outstanding processes; 2) report of offenders on probation and have outstanding processes; and 3) report of offenders with upcoming court dates and outstanding processes. These reports will assist the court and law enforcement with locating the offenders to serve the outstanding processes.

## **IV. CJLEADS Application Design and Development**

Consistent with the original legislative mandate to provide a comprehensive profile of an offender, development will continue to incorporate additional functionality and sources of critical criminal justice information in CJLEADS.

### **Release 6 – Scheduled for June 2012**

The following future functionality has been established for Release 6:

#### **1. Mobile Application**

The technology available to the courts and law enforcement is changing at a rapid pace. Many organizations are using or are planning to use mobile devices such as smart phones and tablets to stay connected in the field ([Appendix G](#).) CJLEADS assembled a focus group to solicit user input to define the required functionality for mobile devices. OSC will work with SAS to build a mobile application for the Android and Apple IOS platforms, as well as a streamlined version of CJLEADS for those users who have limited access through slower mobile broadband devices.



The Department of Justice has developed a NC Sex Offender Registry mobile application and the Department of Corrections has developed a mobile probation and parole application. Law enforcement and the courts have indicated that access to CJLEADS via mobile devices will improve their ability to perform their duties by having access to critical information in a variety of locations and circumstances.

## **2. Enhanced Watch Lists**

In response to requests to enhance the watch list capabilities, a focus group was established to gather business requirements from CJLEADS users. The enhanced watch list capabilities will facilitate better monitoring of offenders and improved communication between criminal justice professionals. An enhanced watch list will add several new capabilities.

Once completed, CJLEADS users will be able to use their individual watch list to flag someone they are watching as “public.” This designation will alert other CJLEADS users that another officer is “watching” an offender that they just looked up. The person viewing the “watched” offender has the option to notify the interested watcher that an encounter has occurred or that an investigatory review is underway. This feature will provide the ability for criminal justice professionals to share information about the offender via watch lists and notifications.

The group shared watch list will allow multiple CJLEADS users subscribed to a common watch list to be alerted on the same offenders. A watch list owner will be able to add group members, such as task force members who may be monitoring a common group of offenders, to the common watch list. This feature will ensure that all members of the group receive the same alerts while eliminating the need for CJLEADS users to individually add those offenders to their personal watch list.

## **3. Additional Reports**

Several new reports will be introduced to assist multiple groups of CJLEADS users:

- A report to provide information to county sheriff’s offices to identify Concealed Handgun Permit (CHP) holders with felony offenses. This will allow the Sheriff to take appropriate action when necessary to revoke the CHP for individuals who are charged with felonies after receiving their permit.
- A report to aid the U.S. Probations Office identifying probationers who have had any criminal justice activity since the last scheduled check-in.
- A report to show sex offenders who have outstanding processes (warrants, orders for arrest, etc.)
- Reports that identify deceased offenders with outstanding processes and deceased offenders with pending court cases.

Additional reports may be added as necessary to support upcoming national events.

## **Future Functionality**

The following areas are being reviewed for future releases of the CJLEADS application:

### **1. NCAWARE**

Law enforcement and the courts have indicated that real-time access to time-sensitive information in the on-line statewide warrant system is critical to CJLEADS. To provide this capability, CJLEADS is partnering with the AOC to develop a web service query that will allow users to search outstanding processes in the statewide warrant repository whenever a CJLEADS query is run. In addition, a link to allow users to quickly log on to NCAWARE would improve efficiencies for law enforcement. AOC has indicated their desire to begin this work in the Spring of 2012.

### **2. Federal Interface – Division of Criminal Information (DCI)**

Both the courts and law enforcement have emphasized the critical need for a federal interface to allow users access to federal and other states' information via CJLEADS. There are a number of security and policy issues that must be addressed to allow CJLEADS to develop an interface to federal systems. CJLEADS, collaborating with the State Bureau of Investigation, North Carolina's CJIS Security Agency, and the Department of Justice Information Technology Division, will develop policies and protocols to allow access to federal and other states' information.

CJLEADS and the Department of Justice have had preliminary discussions about incorporating a DCI interface in the CJLEADS application. DCI would tightly control access from the CJLEADS application by verifying the CJLEADS user against the DCI certification database. Only DCI certified users would be allowed to submit inquiries to the DCI message switch for federal information. CJLEADS would audit all initiated searches, but DCI would audit and control the data transmitted back to CJLEADS users through the message switch. DCI will continue to require that all users needing this access be properly trained and certified for DCI use. In the future, DCI is planning to migrate to NCID as its user authentication method which would allow common login for both CJLEADS and DCI.

### **3. NC-DEx**

CJLEADS is partnering with the NC Department of Justice Information Technology Division to establish a web interface between the North Carolina Data Exchange (NC-DEx) – formerly known as CAPTURES. This interface to the comprehensive incidents database will enable the accurate and timely sharing of law enforcement data and allow authorized NC-DEx users to log into that system from within CJLEADS.

### **4. Facial Recognition**

The ability to positively identify a suspect, offender, or unknown person in the field is critical to law enforcement. The CJLEADS team, in collaboration with DMV, will analyze the ability to capture a photograph in the field and find potential matches for identification purposes by leveraging the existing DMV facial recognition technology.

## **5. DMV Partial Plate**

Currently the CJLEADS/DMV interface allows for vehicle searches using an exact license plate match or a partial Vehicle Identification Number (VIN). Partial plate searches must be manually processed by DMV staff using mainframe programming taking considerable time and staff resources to complete. Because witnesses often remember only parts of the license plate during a traffic or crime incident, law enforcement indicated that searching partial plates online would enhance the ability to respond to incidents more quickly.

## **6. CCBI Images and Data**

CCBI captures photographic images for all individuals arrested in Wake County. CCBI images and identifying information will provide more complete Wake County jail information.

## **7. Juvenile Case Records**

Finalization of business requirements for the data, security and auditing is still pending. AOC has indicated that their current resources are not sufficient to undertake and complete this development task.

## **8. Business Analytics**

With the data integrated into CJLEADS, there is great potential to mine the data for statistical analysis and reporting. Court and law enforcement personnel have suggested many opportunities to leverage the information in CJLEADS to improve efficiencies and effectiveness through the criminal justice community. The project team will work with business users to determine requirements for data analytics.

The State project team continues development of these reports, and each report will be deployed in system releases as they are completed.

Examples of potential reports and business analysis include:

1. Risk assessment for offenders based on historical data and statistical analysis.
2. Offender relationships and connections with other offenders.

For a list of data and functionality suggested by criminal justice professionals throughout the State, please see [Appendix F](#).

# **V. CJLEADS Challenges**

The integration of data across multiple and often disparate applications brings with it many challenges. The following issues have been identified:

#### **A. Access to Federal Data**

CJLEADS provides a comprehensive profile of an offender's North Carolina information. The courts and law enforcement, however, have expressed the need to access federal and other states' criminal justice information in CJLEADS as well.

CJLEADS has proposed adding a warning flag for hot file information (note: Hot file information includes information on stolen and recovered property and wanted/missing persons as entered by agencies across the nation). This flag would notify the CJLEADS user that a further DCI inquiry is necessary to determine required actions. The SBI and NC DOJ IT have indicated their support of such a hot file flag in CJLEADS and will work with CJLEADS on this implementation after they have upgraded their communications to NCIC to include web services.

NC DOJ IT and OSC have discussed developing an approach for providing access to federal data access via an interface between CJLEADS and DCI for DCI certified criminal justice professionals. The SBI and CJLEADS will collaboratively work to build a web interface after they have updated their communications to NCIC to include web services.

Currently the only piece of federal information contained in CJLEADS is the Federal Bureau of Investigation identification number (FBI #). This identifier is provided to CJLEADS through various data source systems. During the initial pilot phase of the project, OSC, SAS, SBI and the FBI developed a Memorandum of Understanding outlining the security requirements associated with storing the FBI # for use in CJLEADS. Procedures associated with the MOU included multiple layers of physical and virtual security for the CJLEADS hardware and application, federal criminal background checks for all project personnel, and signed CJIS Security Addendum Certification and Non-disclosure Agreements.

Following the recommendation that the OSC continue to host and manage the CJLEADS application under the Statewide Data Integration initiative, the SBI informed the OSC that the FBI would require removal of the FBI # from CJLEADS as the system was not administered by a law enforcement organization. However, based on feedback from the CJLEADS user community indicating the importance of the FBI #, the SBI is working with OSC and the FBI to explore the possibility of retaining this key field until the DCI interface described above can be developed.

#### **B. Funding Availability**

The original CJLEADS three-year cost estimates, including initial pilot startup costs in FY 2008-2009, were \$27 million to support 30,000 criminal justice professionals statewide. To date, \$17,647,587 has been spent. Including estimated FY 2011- 2012 costs of \$7,705,737, the total cost of statewide deployment to 30,000 users is \$25,353,324 -- or approximately 7% under budget. Estimates of annual operations and maintenance costs are approximately \$8 million.

### Actual/Estimated Costs

	FY 2008-2009	FY 2009-2010	FY 2010-2011	FY 2011-2012	FY 2012-2013	FY 2013-2014
	Actual	Actual	Actual	Estimated Cost	Estimated Cost	Estimated Cost
<b><u>SAS Hosted Solution</u></b>						
State Operations	\$128,091	\$390,601	\$1,415,978	\$2,364,737	\$2,516,377	\$2,516,377
Development/Hosting/Software	\$2,000,000	\$7,252,426	\$6,460,491	\$5,378,000	\$5,480,000	\$5,500,000
<b>Total</b>	<b>\$2,128,091</b>	<b>\$7,643,027</b>	<b>\$7,876,469</b>	<b>\$7,705,737 *</b>	<b>\$7,996,377</b>	<b>\$8,016,377</b>
* Adjusted budget based on funding reduction						

For FY 2011-2012, the recurring continuation budget appropriation of \$9 million was required to fully fund the integration of critical sources of data and functionality, support 24x7 operations, and deploy CJLEADS statewide. However, due to the State's economic condition, the CJLEADS budget was reduced by approximately 26% (\$2,367,263). The reduced funding resulted in the elimination of 4.5 FTEs, delayed hiring and training of additional project support and technical staff positions until later this fiscal year, and reduced development hours. In addition to the budget appropriation of \$6,632,737, CJLEADS used \$1.07 million in one-time unexpended funds for a total budget of \$7,705,737, to support the integration of critical data and functionality for the current fiscal year.

The following chart provides a summary of funding allocation to support the production implementation of the CJLEADS application.

### Funding

FY 2011 - 2012		
	Appropriated/ Available	Committed/ Expended
<b><u>CJLEADS Funds</u></b>		
FY 2010-2011 Appropriation	\$6,632,737	
Unexpended CJLEADS/Data Integration Funds	\$1,073,000	
SAS Contractual Hosting/Development Services		\$3,378,000
SAS Judicial Branch License		\$2,000,000
State Operations Expenditures		\$2,327,737
<b>CJLEADS Total</b>	<b>\$7,705,737</b>	<b>\$7,705,737</b>

## **Expenditures FY 2011 - 2012**

<b>As of February 28, 2012</b>			
	<b>Estimated</b>	<b>Actual</b>	<b>Balance</b>
<b><u>CJLEADS Funding</u></b>			
Recurring Funding	\$6,632,737		
Non-curring Funding	1,073,000		
Miscellaneous Expenditures			
	<b>\$7,705,737</b>		
<b><u>CJLEADS Expenditures</u></b>			
Total Project FY 2010 - 2011			
State Project Team Expenditures	\$2,327,737	\$1,061,252	
Hosting Contract Services	1,330,000	1,330,000	
Development/Support Contract Services	2,048,000	1,382,400	
SAS ELA Renewal	2,000,000	2,000,000	
Miscellaneous Expenditures			
<b>CJLEADS Total</b>	<b>\$ 7,705,737</b>	<b>\$ 5,773,652</b>	<b>\$1,932,085</b>

The CJLEADS application and the data integrated thus far represents a solid foundation for the support of criminal justice agencies and their personnel, but a tremendous amount of work remains to fully meet the mission and objectives established by the North Carolina General Assembly. Completing the integration of remaining sources of North Carolina information, adding an interface for federal information, fully leveraging the DMV interface capabilities and providing additional reporting is critical to serve law enforcement with a single robust and reliable source of information.

### **Budget Expansion Request**

The reduced funding severely impacted the ability to design and develop additional data sources and critical technical functionality. A budget expansion request of \$2.367 million was submitted to restore the total recurring CJLEADS budget of approximately \$9 million. This budget will be needed to allow for continued hosting and support by the data integration vendor, on-going operations, migration to a new enterprise database solution and to protect the State's investment in CJLEADS by minimally funding continuing enhancements to the application and upgrades to keep pace with evolving technology.

### **Return on Investment**

The value of the CJLEADS data and functionality to the courts and law enforcement is significantly greater than the development and operations and maintenance costs. Return on investment is found as intangible benefits of improved efficiency, better informed decision making, and improved safety for law enforcement and the public. The ability to access integrated statewide information in a single web-based application allows the courts and law enforcement to save valuable time researching information and focus their

efforts on more important public safety specific job responsibilities. These benefits permit criminal justice professionals to be safer, more effective and more efficient.

Intangible benefits for FY 2010-2011, based on actual usage of the application during the Wake County pilot and Phase I rollout, were approximately \$4.3 million. Leveraging the average usage statistics for FY 2010–2011, estimated annual benefits of CJLEADS are approximately \$22 million. For detailed analysis of the ROI, please see [Appendix D](#).

### **C. Database Evaluation**

The CJLEADS infrastructure and technical capabilities are imperative to maintaining a highly available, reliable and responsive system for the courts and law enforcement. When initially designed, the CJLEADS team considered a number of database alternatives. The team recognized the importance of rapid performance and responsiveness for the CJLEADS end users. Database technology is an expensive component of overall technical infrastructure, both in terms of licensing and hardware and support costs.

The CJLEADS team, working with SAS, chose a leading edge database technology, AsterData, to achieve high performance at very low cost. The risk of using this new leading edge technology was offset by the significant cost difference. When AsterData was originally selected, the vendor agreed to convert the application, at no cost, to a new database technology should AsterData fail to be a viable option. The State, however, would be responsible for the costs of new database licenses.

AsterData was recently acquired by a larger database company. In consideration of the uncertain future of the AsterData product, along with challenges encountered in maintaining the AsterData database, CJLEADS worked with SAS to evaluate other database options. An Oracle ExaData solution was identified as the best-practice solution for CJLEADS now and will lay the foundation for other enterprise programs (such as NCFACS). Since the costs of this solution will exceed current budget allocations, the budget expansion request included a request for funding to support this database solution.

### **D. Mobile Access**

A challenge to the deployment of CJLEADS is limited access to the internet when criminal justice professionals are in the field. Nearly all office facilities throughout the State have adequate communication bandwidth and internet capabilities to gain access to CJLEADS. The past approach to mobile access through the internet via the CJIN Mobile Data Network (with its limited bandwidth) will not support transmission of photographic images. The State Highway Patrol, probation and parole officers, smaller police organizations, and agencies located in rural areas have limited access to the internet using mobile computer equipment. Access to CJLEADS information and photographic images in the field is critical for the most effective use of the system and improved safety of law enforcement and the public.

The North Carolina State Highway Patrol (SHP), for example, has air cards available primarily for its Motor Carrier officers. Funding constraints have limited the ability to provide air cards for patrol troopers and line sergeants throughout the State. As a statewide law enforcement agency with statewide arrest powers, it is critical that the SHP's officers be able to access CJLEADS; doing so will protect them and the public during traffic incidents and investigations on North Carolina's roadways as well as when the officer is providing support to local law enforcement agencies either during the commission of a crime or in the pursuit of an offender or escapee.

Additional thought must be given to improving mobile computing for criminal justice professionals throughout the State. Procurement of mobile computer equipment, air cards, and improvements to the CJIN Mobile Data Network may be necessary not only for access to CJLEADS, but also for access to other new web-based systems including NCAWARE.

OSC will work closely with the SHP as well as other organizations to attempt to secure funding to provide mobile access through air card service as well as investigating the most cost-effective service options available to law enforcement in North Carolina.

#### **E. Infrastructure**

With the budget reductions noted earlier in this report, there are several concerns related to Information Technology costs and services to support CJLEADS.

As the project team evaluates options for incorporating federal information into CJLEADS, the program will be required to implement more stringent security protocols, including two-factor authentication. Two-factor authentication involves "something the user knows" and "something the user has" in order to access the system. For example, the user knows his user ID and also provides an access code from a physical or virtual token to which only he has access. Using these two factors, the application provides a higher level of access security than simply using a user ID which may be compromised. Initial cost estimates for two factor authentication through the State's ITS enterprise services were extraordinarily high (\$16M). As a consequence, the team is continuing to search for more cost effective alternatives.

Finally, CJLEADS is leveraging the State's standard identity management system, NCID. A number of agencies, including federal organizations and some local law enforcement agencies, do not readily meet the NCID user-type categories. While the CJLEADS team has worked with ITS to establish an interim solution for these groups, a long-term resolution for these sworn law enforcement organizations is required from ITS.

#### **F. JWISE**

The integration of JWISE data remains a priority for CJLEADS. JWISE data will serve as an indicator for AOC and DJJDP authorized criminal justice professionals that juvenile court records are available. While significant work toward defining the business requirements for the inclusion of JWISE has been completed with AOC and DJJDP, the



progress on JWISE data has been impacted as resource constraints at AOC prevent finalizing the business requirements and developing the data extract to provide data to CJLEADS.

#### **G. No Cost for Law Enforcement**

Consistently over time, local law enforcement has expressed concern about limited local government budgets and increasing costs associated with ensuring public safety. The OSC agrees with the General Assembly's position that there should be no usage fees for law enforcement to access the CJLEADS application. CJLEADS provides valuable, much needed access to the statewide library of data through a single, secure system. To ensure wide-spread adoption and usage of CJLEADS, OSC recommends that the General Assembly continue to fully fund and support the CJLEADS program for sworn law enforcement organizations with an operational presence in North Carolina. In addition, OSC strongly recommends that there be no cost for the administration of NCID user accounts for non-state law enforcement organizations.

## **VI. Next Steps**

Remaining FY 2011-12 activities include:

1. Statewide Deployment
  - a. Training shall continue via webinar and at regional locations throughout the State.
  - b. Deployment to statewide agencies including AOC agencies, SBI and SHP shall be ongoing.
2. Release 6 – June 2012
  - a. Release 6 development items and test in preparation for deployment shall be completed.
  - b. All user documentation and refresher training materials shall be updated.
3. Release 7 – (Date TBD)
  - a. Priorities will be reviewed and reevaluated and deliverables established for future releases of the application.
  - b. Work effort and release schedule shall be planned and distributed.
4. Vendor hosting and support shall continue.
5. The State project team will document areas for continuous improvement and future enhancements for the CJLEADS application.

## **Appendix A: CJLEADS Program History**

In 2008, the General Assembly adopted section 6.15 in S.L. 2008-107, House Bill 2436, and created the Criminal Justice Data Integration Pilot Program. It was the General Assembly's intent in mandating the formation of this data integration project to create a statewide crime analysis system designed to save time, save money, and save lives.

Since the project's inception, the Office of State Controller (OSC) has managed CJLEADS, working closely with the Wake County Criminal Justice Advisory Committee, the Statewide Interagency Leadership Council, and partner agencies including the Administrative Office of the Courts, Department of Correction, Department of Crime Control and Public Safety, Department of Justice/State Bureau of Investigation, Department of Juvenile Justice and Delinquency Prevention, Division of Motor Vehicles, North Carolina Association of Chiefs of Police, North Carolina Sheriff's Association and the Wake County courts.

Subject matter expertise and guidance on industry best practices is being provided with the assistance of George Ake of the National Institute of Justice, Fletcher Clay, former Patrol Commander of the North Carolina State Highway Patrol, and Ike Avery, former Senior Deputy Attorney General with the North Carolina Department of Justice.

The General Assembly charged the OSC with the responsibility of developing and implementing a tool to serve law enforcement and the courts by integrating and providing up-to-date criminal information through a single, secure, web-based application. The State Controller selected SAS as a vendor partner and in collaboration with criminal justice organizations in the State of North Carolina and Wake County, developed and implemented the Wake County Data Integration Pilot Program now known as CJLEADS. Consistent with the Legislature's intent to serve criminal justice professionals and improve the safety of North Carolina's citizens, CJLEADS has two primary objectives:

1. To provide a comprehensive view of an offender through a single application, allowing for positive identification of an offender through a photographic image.
2. To provide an "offender watch" capability to alert criminal justice professionals when an offender has a change in status.

After consolidating over 42 million records associated with 13.6 million recorded offenders and successfully deploying the Wake County pilot, the OSC began a phased statewide deployment in January, 2011. With our primary focus to serve criminal justice professionals throughout North Carolina and improve the safety of our citizens, we have made every effort to facilitate rapid deployment and accelerate the schedule for each regional phase.

In mid-September, 2011, the CJLEADS project team completed kick-off meetings to all areas of the State, concluding Phase III of the project three months ahead of the previously reported schedule. In all, OSC conducted 53 kick-off meetings presenting information to over 1,200 criminal justice professionals throughout the State. Training opportunities are available statewide to law enforcement and court personnel.

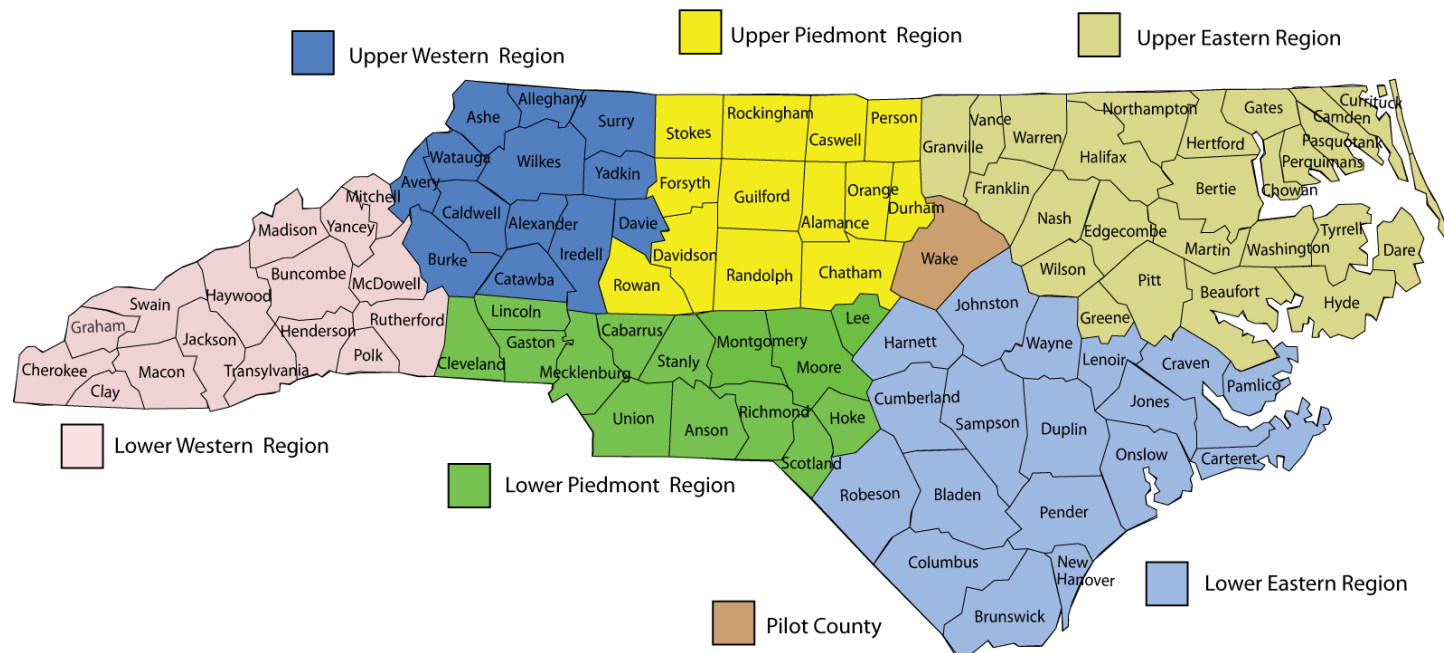
CJLEADS, with its focus on innovation and its impact in improving the safety of North Carolina citizens and criminal justice professionals, received national recognition that resulted in the receipt of significant awards. During 2011, CJLEADS received the following awards:

- 2011 Computerworld Honors Laureate
- 2011 SAS Enterprise Excellence Award (Government Sector)
- 2011 Council of State Government Innovations Award for the Southern Region
- 2011 *InformationWeek* Government Innovators Award

It is clear that the project has made significant inroads in integrating the State's criminal justice data. While the recognition is evidence of third-party appreciation for the innovation and effort of the State and its employees, there is no doubt that significant work remains before the project can move from a development phase to maintenance. CJLEADS will continue to train criminal justice professionals statewide as well as to develop essential interfaces required to provide an application which fully meets the expectations of the General Assembly, the needs of criminal justice professionals, and maximizes the investment to be derived from the utilization of the State's data.

Appendix B: Statewide Deployment Map

# CJLEADS Regional Deployment



## **Appendix C: Phase II End User Survey**

In the January 2012 report, statistics from the Phase I End User survey were reflected in Appendix C. The following statistics are results of a survey of Phase II users taken in March 2012.

The Phase II user satisfaction survey was sent to approximately 2,246 Phase II CJLEADS users. The greatest response was from the law enforcement community. The following survey results are based on responses from 215 or almost 10% of the end users surveyed.

- 98% of respondents indicated that CJLEADS is reliable and available when they need it.
- CJLEADS is used for the following purposes:
  - 77% of respondents use CJLEADS “always” or “frequently” to correctly/positively identify person(s)
  - 75% of respondents use CJLEADS “always” or “frequently” to assist in investigations
- CJLEADS functionality received positive feedback:
  - 95% were “very satisfied” or “satisfied” with the system logon process
  - 94% were “very satisfied” or “satisfied” with the search capability
  - 91% were “very satisfied” or “satisfied” with the print capability
  - 96% were “very satisfied” or “satisfied” with the reporting capability
  - 96% were “very satisfied” or “satisfied” with the watch list and alert capability
  - 96% were “very satisfied” or “satisfied” with the overall ease of use
- CJLEADS data content received positive feedback:
  - 96% were “very satisfied” or “satisfied” with the completeness of offender information
  - 95% were “very satisfied” or “satisfied” with the quality of offender information
  - 96% were “very satisfied” or “satisfied” with the display of offender information
- The addition of new CJLEADS data interfaces was very well received:
  - 94% were “very satisfied” or “satisfied” with the addition of DMV information
  - 95% were “very satisfied” or “satisfied” with the addition of NC Sex Offender information
  - 96% were “very satisfied” or “satisfied” with the addition of Concealed Handgun Permit information
  - 97% were “very satisfied” or “satisfied” with the addition of NC Wildlife information
- 99% of respondents indicated that CJLEADS is a value to their agency.
- CJLEADS has improved agency efficiency:
  - 93% agreed that CJLEADS helps them receive offender information faster
  - 93% agreed that CJLEADS helps them use offender information more effectively
  - 93% agreed that CJLEADS helps them use offender information more efficiently

The areas where users would like to see improvement included:

- Respondents indicated the need for DCI/NCIC information to include hot file information such as stolen vehicle and property and missing or wanted persons. CJLEADS and DOJ are working together on this issue as a future functionality.
- While data is complete and readily available, respondents continue to indicate that closer to real-time data is important. CJLEADS is currently working with AOC to develop an approach to provide real-time information from the Statewide Warrant Repository to CJLEADS users.
- Respondents also indicate a need for more picture use such as tattoos (especially gang-related), the ability to enlarge photos, and use photos for line-ups.

### **How are you using CJLEADS?**

*“Search for offender name by address when incomplete name known.”*

*“It helps us in the Jail identify offenders who are into gangs, or assaultive.”*

*“I like the ease in which I can use CJ Leads to run a vehicle registration and the owner's license info automatically pops up.”*

*“It has proven to be a great tracker of offenders, be it for court or any contact that is made if the offender has been placed on the watch list.”*

*“It is very helpful in locating new addresses on defendants who have active warrants for their arrest and also to verify information on subjects when the information is given to me by a subject I am looking for, or by a third party.”*

*“I add all wanted persons our agency has entered NCIC to my watch list. The alert notifications are very helpful, especially if another agency has served warrants and not notified us.”*

*“I have found that if I am searching for someone but do not know their name but can get the name of a person they live with I can search that person, obtain an address and then search the address to locate who I am looking for. If you have the time to sit down and work with the program you can locate almost anything you may be looking for.”*

*“To monitor local gang members within the court system (i.e. jail, arrest, warrants, history)”*

*“Cross referencing Illegal Aliens who use different names and Dates of Birth”*

*“Keeping track of individuals that I have issued warrants for. I put them on my watch list and it lets me know the next day that they have been served and where they are.”*

### **Is CJLEADS a benefit to your organization?**

*“Excellent system. Where was it 10 years ago?”*

*“It is a very good tool in helping out with our safety. It helps us know a background of the subjects we are coming in contact with on the road.”*

*"CJLEADS is invaluable to our small police department. CJLEADS' real time information enhances officer safety, patrol, investigative, and administrative functions. CJLEADS was well thought out and developed. We are grateful that this great benefit is provided."*

*"One of the best tools ever. It is simple fast information. The best part is how simple it is. The use of blocks/tabs without having to search for information is great."*

### **Should CJLEADS be expanded to provide more data or functionality?**

*"Need to move from the Flash version to HTML5, and make a mobile version for both Android and iPhone platforms. Difficult to use on Android the way it is now, and iPhone has no Flash support."*

*"YES... need DMV Stolen Files... I stopped a stolen car and didn't even know it was stolen"*

*"Adding DCI/NCIC inquiry capability to CJLEADS would greatly improve both the success of the program and the effectiveness of officers in the field. An example in my particular area would be the recovery of stolen vehicles when running registration information."*

*"Would really like to see interface with Register of Deeds in all counties in the state to obtain marriage, divorce, death, birth, etc. information. That would be a great benefit. If it is public record we should be able to get it without any problem."*

*"Please just continue linking with other informational banks. Now I am checking with not only CJLEADS but also NCAWARE & P2P. I do not know if it is already available but linking with DCI would be great. I work in a college town with lots of out of state license plates and drivers licenses."*

*"Real-time access to active warrants and criminal summons would be nice."*

*"It would be nice to incorporate some of the features of NCAWARE."*

## Appendix D: Return on Investment Analysis

ROI Source												FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	
	Actual			Estimated															
	Total Active Users (as of June 2011)	Actual Number of Records Accessed (FY 10-11)	Average Records Accessed per Week (Offender + DMV Jan- June 2011)	Average Annual Records Accessed per User (weekly avg * 50 wks)	Estimated Total Users (Full Deployment)	Estimated High Usage Users (30% of Active Users)	Annual Records Accessed (High Usage Users * Average Annual Records Accessed)	Research Time Saved per Record Accessed (minutes)	Hours Saved (FY 10-11)	Annual Hours Saved (Projected Years)	Hourly Rate								
Improved Efficiency and Automation																			
Judicial Staff																			
Judicial	82	3,168	11	550	300	90	49,500	10	528	8,250	\$30			\$ 15,840	\$ 247,500	\$ 247,500	\$ 247,500		
Clerks	361	8,958	7	350	500	150	52,500	10	1,493	8,750	\$30			\$ 44,790	\$ 262,500	\$ 262,500	\$ 262,500		
Magistrates	212	20,160	25	1250	600	180	225,000	10	3,360	37,500	\$30			\$ 100,800	\$ 1,125,000	\$ 1,125,000	\$ 1,125,000		
Prosecutors	458	22,914	11	550	800	240	132,000	10	3,819	22,000	\$30			\$ 114,570	\$ 660,000	\$ 660,000	\$ 660,000		
Sub Total	1,113	55,200	12	2,700	2,200	660	459,000		9,200	76,500				\$ 276,000	\$ 2,295,000	\$ 2,295,000	\$ 2,295,000		
Law Enforcement Staff																			
Law Enforcement	5713	853,169	21	1050	20000	6000	6,300,000	5	71,097	525,000	\$25			\$ 1,777,435	\$ 13,125,000	\$ 13,125,000	\$ 13,125,000		
Law Enforcement Support	294	14859	15	750	2000	600	450,000	5	1,238	37,500	\$20			\$ 24,765	\$ 750,000	\$ 750,000	\$ 750,000		
Sub Total	6,007	868,028	21	1,800	22,000	6,600	6,750,000		72,336	562,500				\$ 1,802,200	\$ 13,875,000	\$ 13,875,000	\$ 13,875,000		
Corrections Staff																			
Probation	26	3827	24	1200	2000	600	720,000	5	319	60,000	\$20			\$ 6,378	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000		
Prison Intake & Support	18	535	7	350	200	60	21,000	5	45	1,750	\$20			\$ 892	\$ 35,000	\$ 35,000	\$ 35,000		
Sub Total	44	4,362	17	1,550	2,200	660	741,000		364	61,750				\$ 7,270	\$ 1,235,000	\$ 1,235,000	\$ 1,235,000		
Juvenile Justice Staff																			
Court Counselors	24	2720	7	350	100	30	10,500	5	227	875	\$20			\$ 4,533	\$ 17,500	\$ 17,500	\$ 17,500		
Improved Efficiency & Automation Sub-total	7,188	930,310			26,500	7,950	7,960,500		82,126	701,625				2,090,004	17,422,500	17,422,500	17,422,500		
Improved Safety - Cost Avoidance																			
							Number of Potential Lives Saved Annually			Value of a Life	Total Value								
Post Pilot - Save four lives with integration of offender information							4			\$ 1,125,000	\$ 4,500,000			\$ 2,250,000	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000		
Total Improved Efficiency and Automation and Improved Safety															\$ 4,340,004	\$ 21,922,500	\$ 21,922,500	\$ 21,922,500	\$ 21,922,500
Development Cost																			
ANNUAL																			
Actual Development Costs												\$ 2,128,091	\$ 7,643,027	\$ 7,876,469					
Estimated Development Costs															\$ 7,705,737	\$ 7,996,377	\$ 7,996,377	\$ 7,996,377	
												Total Costs	\$ 2,128,091	\$ 7,643,027	\$ 7,876,469	\$ 7,705,737	\$ 7,996,377	\$ 8,016,377	\$ 8,016,377
Estimated Implementation Savings														\$ 4,340,004	\$ 21,922,500	\$ 21,922,500	\$ 21,922,500	\$ 21,922,500	
CUMULATIVE																			
Total Costs												\$ 2,128,091	\$ 9,771,118	\$ 17,647,587	\$ 25,353,324	\$ 33,349,701	\$ 41,366,078	\$ 49,382,455	
Estimated Implementation Savings														\$ 4,340,004	\$ 26,262,504	\$ 48,185,004	\$ 70,107,504	\$ 92,030,004	
Return														\$ (13,307,583.25)	\$ 909,179.75	\$ 14,835,302.75	\$ 28,741,425.75	\$ 42,647,548.75	
Improved Efficiency and Automation	Efficiency savings for law enforcement assumed 30% of the anticipated 22,000 LEO and LEO support personnel will be "high volume" users and will access an average of 21 offender or DMV records per week. Conservatively, if each inquiry saves a law enforcement																		
	Courts personnel have indicated that they are saving 33% of the resource time required to research information, approximately 10 minutes per investigation. Savings associated with actual courts usage in FY 2011-2012 are calculated to be \$276,000. Assumi																		
Improved Safety	The cost of a human life is estimated at 1.125 million. Computation of Human Life value requires a detailed analysis of many factors.																		
	For simplicity if an individual is murdered at 35 and has 30 years of future income of which 75% is spent on his/her family then the value of the life would equal (30*(50,000*.75)) The value of a human life would equal 1,125,000																		



### **Return on Investment**

Return on investment is found as intangible benefits of improved efficiency, better informed decision making, and improved safety for law enforcement and the public. The ability to access integrated statewide information in a single web-based application allows the courts and law enforcement to save valuable time researching information and focus their efforts on more important public safety specific job responsibilities. These benefits do not provide monetary budget savings, but do permit criminal justice professionals to be more effective and efficient.

Intangible benefits for FY 2010-2011, based on actual usage of the application during the Wake County pilot and Phase I rollout, are approximately \$4.3 million. Leveraging the average usage statistics for FY 2010–2011, estimated annual benefits of CJLEADS are approximately \$22 million. These projected intangible benefits, based upon FY 2010–2011 current usage, include:

- CJLEADS will provide a more efficient method for offender searches providing a wider and more inclusive base of information through a single search process. Efficiency savings for law enforcement assumed 30% of the anticipated 22,000 LEO and LEO support personnel will be “high volume” users who will access an average of 21 offender or DMV records per week. Conservatively, if each inquiry saves a law enforcement officer five minutes of research time, the estimated saving are \$13.875 million annually.

This does not represent a reduction in workforce, but improved efficiency as well as improved information and decision making by law enforcement officers. For example, if a law enforcement officer can more quickly access and review information about individuals involved in a motor vehicle accident, he will be able to return to managing traffic flow, resolving the incident and resume normal patrol activities in a timely manner.

- Wake County Clerk of Court personnel indicated that they are saving 33% of the resource time required to research information, approximately 10 minutes per investigation. Savings associated with actual courts usage in FY 2011-2012 are calculated to be \$276,000. Assuming 30% of authorized court personnel are “high volume” users, and will access an average of 16 offenders or DMV records per week, and each inquiry saves 10 minutes of research time, the estimated savings are \$2.295 million annually. This efficiency should allow court personnel to complete research in less time, helping them better manage the ever-increasing court system case load resulting in better administration of justice and service for the State’s citizens.
- Other CJLEADS users, including probation and parole officers, prison intake officers and juvenile court counselors, are estimated to save an average of five minutes for each offender or DMV record accessed. Assuming 30% of other users are “high volume” users and will access an average of 17 offenders or DMV records per week, the estimated annual savings are \$1.253 million. This will allow probation and parole officers, prison intake officers, and juvenile court counselors to quickly access information about offenders under their supervision and to better focus their efforts on interaction and supervision activities.
- Similar to an appraisal of the value of life in court cases, based upon life span and earning potential, an average actuarial estimate of the value of a life saved is stated at \$1.125 million. If the use of CJLEADS when fully deployed statewide saves four lives annually, the benefit to the State would be \$4.5 million per year.

Comparing these intangible benefits to project costs, the return on investment analysis, based on just the largest North Carolina counties, CJLEADS yields a project break-even point of four years, or during the second full year of operations.

End Users provided feedback to CJLEADS staff on other areas of costs savings associated with the use of CJLEADS:

- CJLEADS information helps reduce paperwork and the associated work-hour time required to process and serve failure to appear notices for offenders not making required court appearance because they are being held in custody elsewhere in the State.

Laurel Park Police Department stated that CJLEADS “has opened up so much for us. Is a Savior of small departments, others are budget busters!” Further comments include, “Productivity has gone up because of access to CJLEADS. Christmas came early. I waited 11 years for this.”

“CJLEADS is quite possibly one of the most comprehensive, effective projects brought to the street-level officer. The ability to search data compiled together, as well as cross-reference DMV, AOC and DOC have reduced the amount of leg-work required to obtain critical information and increased the success rate of mission completion. Officers who were skeptical regarding CJLEADS, including myself, were very quickly shown not only the promise CJLEADS projects but the realization of that promise and the success it brings.”

- CJLEADS information allows officers to find court dates for offenders and serve warrants or apprehend the offender in the court.

One respondent noted, “I’m assigned to our traffic unit. Using CJLEADS I’ve gone from serving two or three warrant’s or OFA’s a month to serving thirty to forty. It’s great!!”

Another user said, “Utilizing CJLEADS ability to search criminal history allowed me to identify an individual who was providing me with false information as an individual with outstanding warrants and processes, thus permitting me to effect an arrest that otherwise would have gone unresolved.”

- CJLEADS information allows officers to identify individuals in the field, avoiding the need to take the individual to jail.

One example reported, “I work on a Criminal Interdiction Team and all we do is look for bad guys who are most of the time driving down the road in some type of vehicle. So CJLEADS is a great tool for me and every other Officer. I can get behind a car and run the plate to see if the car has insurance, I can see if the tag is valid, I can also see if the registered owner has a valid driver’s license, and I get a picture of them!!! I can also see if the driver has any pending warrants, I can even look and see what they have been charged with in the past and where. All of this happens in a very short time (as long as my computer has service) and I have not even stopped them yet.”

- CJLEADS information enables inter-agency collaboration by providing statewide information.

An Asheboro police detective gives credit for solving a seventeen year-old murder case to two probation officers three hours away in Columbus County who noticed similarities in CJLEADS between an offender on probation for DWI with the warrant issued in 1994 in Randolph County. After the identification was made, police was able to make the arrest and bring missing suspect back to Asheboro for charges.

A user on the Phase II survey said, “A wanted felon suspect was being sought by U.S. Marshals, Onslow County Sheriff Office and a bonding service. The additional photos and pending arrest warrant information available via CJLEADS assisted this police officer to positively identify and arrest the suspect attempting to board (abscond) a commercial aircraft at our airport and flee the state.”

- CJLEADS information enables better informed decisions by providing statewide information.

Within a week of Pitt County deputies being trained on CJLEADS, they say it is working. Using CJLEADS, officers were able to track down a suspect in Georgia and arrest him. He was wanted in Pitt and Beaufort counties for several charges including communicating threats and breaking and entering.

A group of Sheriff's Deputies in Craven County Officers were sitting in a lobby waiting for the Grand Jury to convene. As the Grand Jury walked past the officers into the jury room, several of them recognized one of the jurors. The officers searched for him on their cell phones with CJLEADS and were able to see that he was not only a convicted felon but had active felony warrants. He was removed from jury before any cases were heard.

## **Appendix F: CJLEADS – Functional Needs**

<b>CJLEADS Functional Needs</b>		
<b>Currently Under Development</b>		
	<b>Value Proposition</b>	<b>Challenges</b>
Various reports requested by criminal justice community 1. Reporting for Concealed Handgun Permit holders with Felonies 2. Reports for U.S. Probations Courts 3. Sex Offenders with Warrants 4. Deceased offenders with OFAs, and Deceased offenders with pending cases	1. Tool to assist Sheriff's Office with review of CHP holders who have felony charges since receiving the permit 2. Series of report to aid officer with determining criminal activity since last contact.	
1. Mobile Application for smartphones and tablets 2. CJLEADS streamlined version for slow broadband connections	Increased mobility for criminal justice professions	
Improved Watch list and Alerting	Creates task force watch lists capability Provides sharing of watch list with peers	

<b>Priority Development</b>		
	<b>Value Proposition</b>	<b>Challenges</b>
Partial Vehicle Plate Number Search Capability	Improves investigations	Requires DMV system development
Integrate Federal Hot Files	Necessary for a composite view of offender	<ul style="list-style-type: none"> <li>Integration with State DCI system</li> <li>Requires updates to DCI to support web service capabilities</li> <li>Requires update to DCI authentication model to accept NCID</li> </ul>

Integrate FRS (Facial Recognition Software)	Leverages DMV FRS system and build an interface with CJLEADS	Identity management requires DMV system development
Develop Photo Line-up capabilities	Assists with investigations	Storage, auditing and investigative business rules

Continued Process Improvement Development		
	Value Proposition	Challenges
Integrate Additional AOC Data <ul style="list-style-type: none"> <li>• E Citation Data</li> <li>• Civil Processes</li> <li>• NCAWARE – near real time</li> <li>• Retainer Data</li> </ul>	Improves offender information	AOC resources needed to develop extracts and business rules
Integrate Additional DMV Data <ul style="list-style-type: none"> <li>• Handicapped Placard</li> <li>• Vehicle Towing Data</li> <li>• Driver's License Revocation Data</li> </ul>	Improves service to citizens	DMV resources needed to develop web services DMV technical infrastructure needed to be modified to support partial plate searches
Integrate Additional DOC Data <ul style="list-style-type: none"> <li>• Electronic Monitoring Bracelet Information</li> <li>• Additional Prisoner Movement Information</li> <li>• Integrate DCC gang related information</li> <li>• Integrate DOC historical images</li> </ul>	Improves offender information	DOC resources need to develop extracts and business rules
Integrate Juvenile Data <ul style="list-style-type: none"> <li>• Juvenile Court Records</li> <li>• Juvenile Secure Custody Orders</li> </ul>	Integrates of juvenile data	Juvenile security access definitions AOC resources needed to develop extracts and business rules

Continued Process Improvement Development		
	Value Proposition	Challenges
Integrate additional DOJ/SBI <ul style="list-style-type: none"> <li>• DNA Tracking Information</li> <li>• Pawn Tracker Information</li> <li>• Local RMS data collected</li> </ul>	Improves offender information	DOJ resources needed to develop extracts and business rules
Integrate Employment Security Commission	Improves investigations	Develop security associated with non- criminal justice information  ESC resources required to support development of extracts and business rules
Integrate Federal Prison Information	Improves investigations and offender management	Identification of Federal entity and integration points
Integrate Federal Joint Automated Booking System(JABS)	Improves investigations and offender management	Identification of Federal entity and integration points
Integrate Death Certificates <ul style="list-style-type: none"> <li>• DHHS- Vital Records</li> <li>• Social Security Administration Death Records</li> </ul>	Improves investigations and offender management	DHHS records extracts and business rules SSA records integration business rules
New Functionality <ul style="list-style-type: none"> <li>• GEO Mapping Offender Addresses</li> <li>• Social Networking</li> </ul>	Improves Investigations	Integrate SAS tools into CJLEADS
Analytical Reporting <ul style="list-style-type: none"> <li>• Sentencing Commission and Prison Populations</li> </ul>		Business Rule development
Medicaid Provider NC Background Reviews	Improves eligibility processing	Security and access agreements
AOC Public Court Records View	Improves access to public court records	User access and scalability New services agreement

## Mobile Device Responses from 146 Agencies

